Enhancing Education Through Technology (EETT) Competitive Sub-grant Application Assurance Sheet

Project Title: Success Through Interaction and Intervention   Amount of Request: $ 75,000

District Name (Fiscal Agent for Consortiums): Payette   Number: 371-J

Please list the school name, and indicate whether it is a targeted school or a partner school and certify the CIPA compliance for all participating schools within the project:

Dist. # or 'P' for Private School	School Name	This school is a targeted school 'T' or a partner school 'P'.	This school is in compliance with the CIPA as outlined on page 3 of the guidance document.
371-J	Payette High School	(T) P	(YES) NO
		T P	YES NO
		T P	YES NO
		T P	YES NO
		T P	YES NO
		T P	YES NO
		T P	YES NO
		T P	YES NO
		T P	YES NO
		T P	YES NO
		T P	YES NO
		T P	YES NO

I certify that we have contacted the charter and private schools in our area about participation in this grant.

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Signature		
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Signature		

Success Through Interaction and Intervention

Success through education has been the forefront of Payette School District's mission to engage and address the needs of all students. However, teachers often turn their backs on their students, both literally and figuratively. This proposal represents a pledge by Payette High School to **face** our students and utilize *technology* to improve teaching practice in order to **engage and support student learning**. Student engagement is critical. Quality teaching requires that students be engaged with the content of learning tasks in a way that will enable them to reach understanding. Because technology increases productivity, brings worldwide experience and expertise into the classroom, and stimulates interest in learning, it is the ultimate tool in the professional educator's repertoire. This proposal will support a program designed to improve *student learning through the effective integration of technology*. We have set the following goals in order to better meet the needs of all students.

1)   **Individualized intervention** through the use of PLATO in order to achieve proficiency in math and as a tool to improve student success through a credit recovery program.

2)   Utilize technology to create an **interactive classroom** that enables teachers to <u>face</u> their students and <u>engage</u> them while instruction is taking place.

3)   Through the use of interactive hand-held personal response pads, all students will **engage** in <u>all</u> classroom Q&A activities, allowing teachers to **assess** student learning immediately.

4)   Through effective professional development, we will train our teachers to **integrate best practices with technology to engage and support student learning**.

We realize that the equipment that this grant will provide is only as good as the **people** who will operate it. Payette High School is committed to a sustained program of professional development, teacher accountability, and product updates to ensure *improved student performance*. A significant part of the budget addresses the need to train our teachers to use the new software, hardware, and instructional tools in an effective and meaningful way.

In summary: Our school improvement plan and ISAT scores indicate a need to improve MATH and SCIENCE scores across the board. Statistics show a particular concern for our Hispanic and economically disadvantaged students. Our goals specifically address those students with the most need but are such that *all students will benefit*. Currently our teachers have outdated desk computers and no access to a functional lab or instructional technology. Integrating these technologies into our curriculum will help us engage all of our students. Additionally, our teachers will be able to *personalize instruction* to a far greater degree than is currently possible. This proposal represents an important step in realizing our goal of **proficiency for all of our students.**

Facts

Payette High School failed to make adequate yearly progress for 2006-2007. This is the second year of school improvement in math and the fourth year in reading. We are working hard to help our students achieve proficiency in all core subjects; however, there is a critical need for more **interactive** and *personalized instruction* to further **engage** our students. The overall goal for this project is to assist students at all levels to improve. The needs of our basic students will be specifically targeted to bring them up to proficiency. We regard the needs being addressed by this program as **urgent**.

Math

In the spring of 2007 Payette High School ISAT scores fell significantly short of the state goal of 70% proficiency in math. At PHS, 9th graders scored at just 51.7% proficient or higher. This represents an 18.3 point gap between our scores and the state goal. Further, the state average for 9th graders in math was 77.4% making the gap between our students and the state average a full 25.7 points. Hispanic students in the 9th grade were even less successful, scoring at only 30.8% proficient or better, a full 25.4 points below the state average of 56.2 %. 10th grade students at PHS scored at 61.02%, illustrating a 9 point gap between the state goal and the scores of our students. Further, our students scored a full 16 points below the state average of 77.02%. Hispanic students in 10th grade scored at only 30% proficient or higher, dramatically below the state goal and even significantly below the state average of 49.5% for Hispanic 10th graders. Our economically disadvantaged population also struggled, scoring at 52.94% in math, illustrating a 17 point gap between the state goal and our score. Statewide this population scored at 67.73%, almost 15 points above our students. On the 2006-07 Direct Math Assessment, 73% of 8th graders (our current freshmen) scored a two or a one. The 2006-07 6th grade class did even worse with a full 80% scoring below three. Clearly we will need to work intensively with these students for years to come. **This data demonstrates a critical concern for our present and future math students.**

Reading and Language

Payette High School fell short of the state goal of 78% proficiency in reading in the spring of 2007. PHS 9th graders scored at 77.6% in reading while the state averaged 87.6%, a 10 point gap. Hispanic 9th graders scored at just 59% proficient or above, significantly below the state average of 71.7%. PHS 10th graders scored at 71.5% in reading, a gap of 6.5 points between the state goal and our score and significantly below the state average 78.8%. Hispanic 10th graders scored at 40% in reading, a full 15 points below the state average of 55%. The state ISAT language goal of 78% was also not met at PHS. Our 9th grade students scored at 38.1% in language, almost 40 points below the state goal. Hispanic 9th graders scored at just 17.9% in language well below the state average of 31.2%. Our 10th graders scored at 62.9% in Language, over 17 points below the state goal and below the state average of 68.1%. Hispanic 9th graders scored at just 26.7% while the state averaged 38.1%, an 11.4 point gap. Our economically disadvantaged students faired poorly as well scoring at 47.06%, a dramatic 31 points below the state goal. With proficiency standards increasing yearly we are in danger of falling even further behind.

Science

Science scores at the 10th grade level also fell short of state averages. Our students scored at 45.8% proficient or better while the state averaged 58.1%, a 12.3 point gap. Hispanic science scores were lower at only 23.3% proficient or better. With science soon to be added to the list of tested subjects we intend to use this proposal to support our science program as well. This proposal will fund needed technology upgrades in all of our science classrooms allowing teachers to craft much more **interactive and engaging lessons**.

Demographics

Payette High School consists of the following demographics: Total enrollment is 525, 20% are Hispanic and 23% are economically disadvantaged. The free and reduced rate for the district runs 77%. We have a mobility rate of 29%. Clearly a significant portion of **our students will benefit from being able to access archived lessons available on the web.** Our economically disadvantaged students are clearly a target for our efforts but our needs are not entirely specific to any one sub group. Our scores did not meet proficiency across the board. The program outlined in this proposal will speak to the needs of all our students.

Target Group

Although we do not meet proficiency goals in any area, our data points to **mathematics** as a critical area in need of intervention. An area of particular concern in math is our **Hispanic population** which continually falls behind. These descriptors assist us in planning our remediation program. While the needs of our **target group of all math students** are certainly addressed by our collective goals, **all students** will benefit from this grant.

Our Current Situation

We have highly qualified teachers with significant classroom experience, but *we are lacking the basic tools of technology* necessary to help students become successful in a modern technology driven world. Further, our lack of technology makes the current programs we have access to, such as PLATO, difficult if not impossible to deliver. Payette High School currently has a computer lab of 20 aging computers which rarely all work at the same time. Most classes at PHS contain more than 20 students. This situation makes it very difficult for teachers to effectively use the lab. Math and science teachers at PHS have minimal technology in their classrooms. Classroom computers are few and far between (usually not more than two per class) and are outdated. This *lack of basic technology is seriously holding our students back*. We know that PLATO can help our struggling students but without up-to-date computers we cannot effectively implement it. *We know that more effective technology in our math and science rooms can be used to create **innovative** and **engaging** lessons for our students with significantly more individualization than we can currently achieve.*

Payette High School is moving in the right direction to make our plan successful. Our math and science curriculums are fully aligned with state standards. We have highly qualified and motivated math and science teachers. PLATO is being used as much as it currently can be and is effective. We have the vision and ideas to **make PHS a truly innovative and engaging learning environment with interactive, individualized lessons and curriculum.** With the tools that many other high schools already have available to them we are confident that we can implement our program successfully.

Our needs are significant, as outlined in the Educational Needs section of this proposal. Our local project addresses these needs in four distinct ways. First, through the use of **PLATO** we can **individualize intervention** in order to achieve proficiency in math and as a tool to improve student success through a **credit recovery program**. Second, we intend to utilize technology to create **interactive classrooms** that enable teachers to **face** their students and **engage** them while instruction is taking place. Third, through the use of interactive hand-held personal response pads, *all students will **engage** in all classroom Q&A activities, allowing teachers to **assess** student learning immediately.* Finally, through effective professional development, we will train our teachers to **integrate best practices with technology to engage and support student learning**.

This grant will address our previously stated goals in the following ways:

- **PLATO as an Intervention:**
  - **30 new computers for the lab.**
    - With this new lab we will serve those students who are struggling to reach proficiency. This lab will serve as an effective tool to support the full integration of PLATO math into our curriculum. Additionally this lab can be used by students for credit recovery through PLATO. We believe the credit recovery aspect of PLATO is greatly underused in our district largely because of our technology shortcomings.
    - This lab will be utilized by a math teacher to address the needs of an entire class of diverse learners. The idea is to place 20-25 near proficient students into the lab with PLATO as the main instructional interface. The math teacher will be there to offer assistance and to design individualized supplements. As these students reach proficiency, they will be rotated into the regular classroom and the next tier of struggling students will be enrolled into the PLATO math class.
    - Other uses for the computer lab include: research, projects, testing, web-based instruction, other PLATO based interventions, and can be scheduled for use by all teachers.
- **Interactive Classroom**
  - **Seven new teacher computers for math and science teachers.**
    - Updated teacher computers are necessary to take full advantage of the vast array of software and web-based curriculum that our teachers have access to. Virtual Labs in science are one example of a technology based curriculum enhancement that our students cannot currently take advantage of. These computer based labs allow students to conduct labs virtually that would normally be too expensive or dangerous to conduct in the classroom.
  - **Seven Interactive Classroom Bundles for math and science teachers.**
    - Each classroom will be equipped with a data projector, document camera, interactive display interface, and a wireless notepad. The essential function of these technologies is to allow the teacher to **face** the class while creating and delivering *visually stimulating and engaging lessons*.
      - The interactive display board effectively replaces an interactive whiteboard by allowing the teacher to maintain eye contact and not

block content. The interface is similar to, yet more powerful than the traditional interactive whiteboard. In addition, this tool allows a teacher to save all lessons as web pages where they can be archived and viewed by students as necessary.

- The wireless notepad allows the teacher freedom of movement around the classroom during instruction and *increases student participation.*
- The document camera allows teachers to present non-digital material and conduct whole-group demonstrations.
- The projector allows the above technologies to be visually available to all students in a size appropriate for the room.

- **Student Assessment**
  - **Three Classroom sets of Interactive hand-held personal response pads (CPS) in math classrooms.**
    - These units will allow teachers to **engage all students** in classroom discussions and question and answer sessions. Additionally teachers will be able to receive feedback and check for understanding immediately during the lesson. A CPS equipped classroom provides the quantitative tools to influence the processing of questions and formulation of answers by the student in a non-threatening and positive manner.

- **Professional Development**
  - **Integrate best practices with technology to engage and support student learning.**
    - PLATO
      - Training with PLATO will allow teachers to effectively provide the interventions that our students desperately need.
    - SIOP
      - Sheltered Instruction Operation Protocol is a researched based intervention that focuses on **teacher practices that engage and support student learning**.
    - Software and Hardware
      - As previously mentioned, most of this technology will be new to our staff. In-depth training will be necessary to create a fluent, comfortable, and self-directed teaching corps capable of utilizing these instructional modalities to their potential.

Measurement

Our quantitative goal is to raise math ISAT scores to state designated proficiency standards. In addition, we will train seven teachers to utilize these instructional technologies and become mentors to other teachers using technology in the classroom. Further, we have a qualitative goal to improve the learning environment for all of our students through the effective integration of technology throughout our curriculum.

Timeline

<u>Within one month of receiving funds:</u> place orders.

<u>Within six months of receiving funds:</u> set up hardware and software, begin the first wave of professional development.

<u>During next school year:</u> run project, document training and development, gather classroom data (scores, assessments, teacher feedback, etc.).

Sustainability

Payette High School is dedicated to the sustainability of this program. This program represents a *major step forward for our school* and we have little reason to step backward. Our math and science teachers have been an integral part of crafting our proposal and their commitment to this program ensures the accomplishment of our goals.

Our new computer lab will be *fully integrated into our curriculum* through the dedicated math classroom(s). These classes will be regular credited classes. Keeping the computers maintained and up to date will be budgeted as a normal expense of keeping our math program functioning.

PLATO is an ongoing program that PHS already has access to and will be able to use much more effectively with increased technology. The extension of PLATO and the addition of our new technology will *provide immediate results for our struggling students.*

Professional development will be ongoing outside of the scope of this initial project. Local funds will be set aside for the instruction of new teachers. Further, teachers will continue to be trained in the latest techniques in using *technology to effectively reach our students with innovative teaching strategies.* Our budget provides for time away from school and/or compensation for time outside of regular school hours.

Evaluation will play an important part in the sustainability of this project. Effective use of technology will be a part of the teacher evaluation process. Current teachers as well as those hired in the future will be held <u>accountable</u> for their role in making this program successful. Future hiring will also reflect continued commitment to this program. New teachers will be hired with an eye toward their familiarity with and willingness to use technology in their classrooms.

Collaboration time where teachers can share and improve their practice will also emphasize the importance of this program. **Cross-curricular** departmental meetings for math and science teachers will be set aside for evaluation and dialogue concerning the shared technology. Sharing of successes and struggles within the program will help us continue to implement this program effectively.

Maintenance and repair of the equipment purchased with this grant will be an inevitable cost. PHS and Payette School District are committed to keeping this equipment in top shape. Budgets will be designed with these important technologies in mind and their maintenance will be a high priority.

Payette High School is committed to a sustained program of professional development, teacher accountability, and product updates to ensure *improved student performance.*

We are excited about this project and are prepared to take it into the future successfully.

Budget Narrative

Payette High School recognizes the critical need to <u>effectively integrate technology into our curriculum</u>. This proposal will assist us in **engaging our students in interactive and innovative ways that research shows will improve learning**. The four goals of this proposal are vital to our continued improvement.

Our budget includes funding for equipment and professional development. Our equipment requirements include: 30 lab computers, 7 teacher computers, 3 class sets of interactive hand-held personal response pads (CPS), miscellaneous cabling and accessories, and 7 *interactive classroom bundles. Each *interactive classroom bundle includes a projector, document camera, wireless notepad, and an interactive display board.

A number of these products may be new. Below are the URL's for those interested in researching these products further.

Wireless Notepad:
http://starboard.hitachi-soft.com/jsp/hitachi/hitachisoft/icg/products/education/details/K-12_BTseries_t.html
Interactive Display:
http://starboard.hitachi-soft.com/jsp/hitachi/hitachisoft/icg/products/education/details/K-12_T17SXL_t.html

Our professional development expenditures include: Training on PLATO, interactive displays, SIOP, CPS, and on using the PC as an instructional modality. Experts from PLATO, Hitachi (interactive display & wireless notepad), SIOP, and CPS will deliver initial and follow-up on-site professional development. The local technology director will provide additional training opportunities on PC use and refresher courses on effective use of technology in the classroom. **Professional development money may be spent to hire substitutes in order to allow in-school training and/or compensation for time outside the regular school day.

Payette High School EETT Grant Budget				
EETT Equipment		**Qty**	**Unit Price**	**Extended Price**
Lab PC		30	$800.00	$24,000.00
Teacher PC		7	$800.00	$5,600.00
Interactive Classroom*		7	$2,802.00	$19,614.00
RF CPS Units		3	$2,050.00	$6,150.00
Misc. Cables, Accessories		1	$880.00	$880.00
Equipment Total				**$56,244.00**
EETT Professional Development	**Freq.**	**Qty****	**Unit Price**	**Extended Price**
Plato Training		1	$3,000.00	$3,000.00
Initial 3 days of 6-Hr. Sessions (**7 teachers, 18 hours)	1	126	$20.00	$2,520.00
Follow-up 2-Hr. Session (**7 teachers, 2 hours)	1	14	$20.00	$280.00
Interactive Display Training Cost		1	$4,750.00	$4,750.00
Initial 6-Hr. Session (**7 teachers, 6 hours)	1	42	$20.00	$840.00
Follow-up 2-Hr. Session (**7 teachers, 2 hours)	1	28	$20.00	$560.00
Teaching Strategies (ELL, SIOP) Cost		1	$1,200.00	$1,200.00
Initial 6-Hr. Session (**7 teachers, 6 hours)	1	42	$20.00	$840.00
Follow-up 2-Hr. Session (**7 teachers, 2 hours)	1	28	$20.00	$560.00
CPS Training Cost			$2,000.00	$2,000.00
Initial 6-Hr. Session (**7 teachers, 6 hours)	1	42	$20.00	$840.00
Follow-up 2-Hr. Session (**7 teachers, 2 hours)	1	14	$20.00	$280.00
PC as an Instructional Modality (All software and hardware and purchased tools)				$0.00
Initial 4-Hr. Session (**7 teachers, 4 hours)	1	28	$20.00	$560.00
Follow-up 1-Hr. Session (**7 teachers, 1 hour)	3	7	$20.00	$420.00
Food and Supplies for In-House Training		1	$106.00	$106.00
Professional Development Total				**$18,756.00**
Total Professional Development				**$18,756.00**
Total Equipment				**$56,244.00**
Total Budget				**$75,000.00**